Title (en)

PROCESS FOR PRODUCING CONDUCTIVE MAYENITE COMPOUND

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER LEITFÄHIGEN MAYENITVERBINDUNG

Title (fr)

PROCESSUS DE PRODUCTION DE COMPOSE MAYENITE CONDUCTEUR

Publication

EP 1897853 A1 20080312 (EN)

Application

EP 06756755 A 20060530

Priority

- JP 2006310807 W 20060530
- JP 2005157882 A 20050530

Abstract (en)

Provided is a method for preparing an electroconductive mayenite type compound with good properties readily and stably at low cost. A production method of an electroconductive mayenite type compound comprising a step of subjecting a precursor to heat treatment, is a method for preparing an electroconductive mayenite type compound, comprising a step of subjecting a precursor to heat treatment; wherein the precursor is a vitreous or crystalline material, which contains Ca and Al, in which a molar ratio of (CaO : Al 2 O 3) is from (12.6:6.4) to (11.7:7.3) as calculated as oxides, and in which a total amount of CaO and Al 2 O 3 is at least 50 mol%, and wherein the heat treatment is heat treatment comprising holding the precursor at a heat treatment temperature T of from 600 to 1415°C and in an inert gas or vacuum atmosphere with an oxygen partial pressure P O2 in a range of P O2 #¦ 10 5 ×exp[{-7.9×10 4 /(T+273)}+14.4] in the unit of Pa.

IPC 8 full level

C01F 7/164 (2022.01); **C01F 7/166** (2022.01); **C01F 7/78** (2022.01); **C03C 4/14** (2006.01); **C03C 10/00** (2006.01); **C04B 35/44** (2006.01); **C04B 35/626** (2006.01); **C30B 29/22** (2006.01); **C30B 33/00** (2006.01); **H01B 1/08** (2006.01)

CPC (source: EP KR US)

C01F 7/16 (2013.01 - KR); **C01F 7/164** (2013.01 - EP US); **C01F 7/166** (2013.01 - EP US); **C01F 7/78** (2022.01 - EP US); **C03C 4/14** (2013.01 - EP US); **C03C 10/0036** (2013.01 - EP US); **C04B 35/44** (2013.01 - EP US); **C04B 35/6262** (2013.01 - EP US); **C04B 35/62675** (2013.01 - EP US); **C04B 35/6268** (2013.01 - EP US); **C30B 29/22** (2013.01 - EP US); **C30B 33/00** (2013.01 - EP US); **H01B 1/08** (2013.01 - EP KR US); C01P 2002/50 (2013.01 - EP US); C01P 2002/84 (2013.01 - EP US); C01P 2006/40 (2013.01 - EP US); C01P 2006/60 (2013.01 - EP US); C04B 2235/3201 (2013.01 - EP US); C04B 2235/3203 (2013.01 - EP US); C04B 2235/3206 (2013.01 - EP US); C04B 2235/3208 (2013.01 - EP US); C04B 2235/3213 (2013.01 - EP US); C04B 2235/3215 (2013.01 - EP US); C04B 2235/3224 (2013.01 - EP US); C04B 2235/3229 (2013.01 - EP US); C04B 2235/3232 (2013.01 - EP US); C04B 2235/3239 (2013.01 - EP US); C04B 2235/3241 (2013.01 - EP US); C04B 2235/3262 (2013.01 - EP US); C04B 2235/3272 (2013.01 - EP US); C04B 2235/3275 (2013.01 - EP US); C04B 2235/3279 (2013.01 - EP US); C04B 2235/3281 (2013.01 - EP US); C04B 2235/3287 (2013.01 - EP US); C04B 2235/3409 (2013.01 - EP US); C04B 2235/3418 (2013.01 - EP US); C04B 2235/44 (2013.01 - EP US); C04B 2235/444 (2013.01 - EP US); C04B 2235/445 (2013.01 - EP US); C04B 2235/446 (2013.01 - EP US); C04B 2235/652 (2013.01 - EP US)

Cited by

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